

Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I

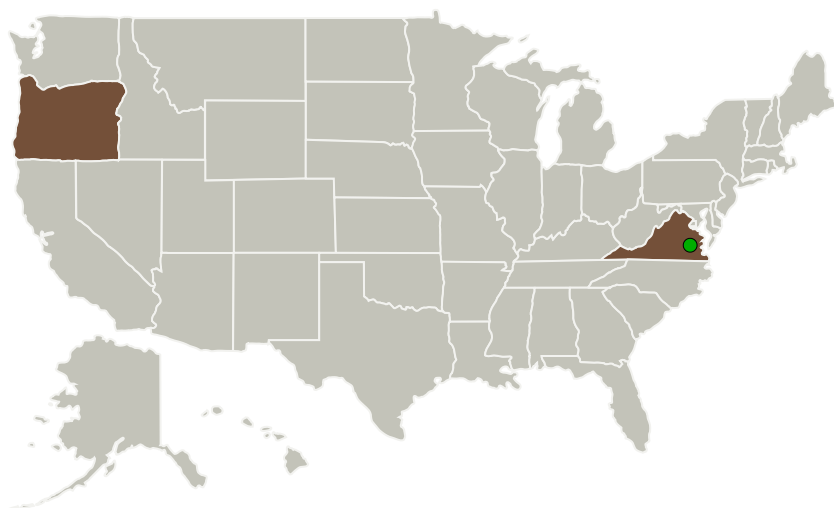
Completed Technology Project (2016 - 2016)



Project Introduction

We integrate existing technologies and build an infrastructure that is ready to leverage emerging technologies to realize an oceanic TBO capability that is seamless with the domestic air traffic operations and a solution that is within the near-term horizon. Technologies include surveillance (both traditional ADS-B and space-based ADS-B) as well as domestic weather radar and other weather source (e.g., GOES satellite information), and a probing capability to allow oceanic traffic to plan TBO operations into domestic airspace. We investigate how to assist the airlines in submitting oceanic flight plan amendments in Trajectory Options Set (TOS) formats for offshore airspace compatible with the FAA's Collaborative Trajectory Options Program (CTOP).

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
The Innovation Laboratory, Inc.	Lead Organization	Industry Women-Owned Small Business (WOSB)	Portland, Oregon
● Langley Research Center(LaRC)	Supporting Organization	NASA Center	Hampton, Virginia



Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I

Table of Contents

Project Introduction	1
Primary U.S. Work Locations and Key Partners	1
Project Transitions	2
Images	2
Organizational Responsibility	2
Project Management	2
Technology Maturity (TRL)	2
Technology Areas	3
Target Destinations	3

Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I

Completed Technology Project (2016 - 2016)



Primary U.S. Work Locations

Oregon

Virginia

Project Transitions

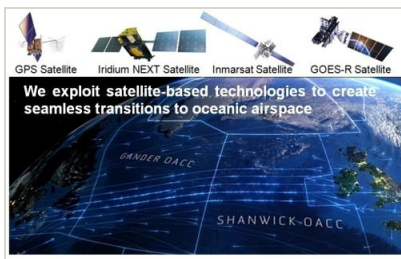
June 2016: Project Start

December 2016: Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/139777>)

Images



Briefing Chart Image

Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I
(<https://techport.nasa.gov/image/133876>)



Final Summary Chart Image

Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I Project Image
(<https://techport.nasa.gov/image/135356>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

The Innovation Laboratory, Inc.

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

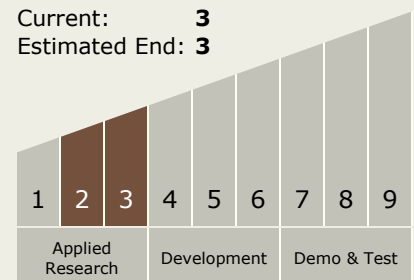
Carlos Torrez

Principal Investigator:

Jimmy Krozel

Technology Maturity (TRL)

Start: 2
Current: 3
Estimated End: 3



Integrated Technologies Supporting Seamless Oceanic Transitions, Phase I

Completed Technology Project (2016 - 2016)



Technology Areas

Primary:

- TX01 Propulsion Systems
 - └ TX01.3 Aero Propulsion
 - └ TX01.3.1 Integrated Systems and Ancillary Technologies

Target Destinations

The Sun, Earth, The Moon,
Mars, Others Inside the Solar
System, Outside the Solar
System